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Polytechnic Education In Ghana: Management Delivery And Challenges

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Abstract:

Polytechnics in Ghana are part of the higher institutional network responsible for training high quality multi-skilled units of human capacity relevant to the national need of the Ghana. This paper empirically examines the management, delivery and the challenges of polytechnics in Ghana. A cross-section design was used as well as multi-stage sampling technique. In addition, both qualitative and quantitative methods of data collections and analysis were also used. The study showed that the governing council is the highest decision making body of the polytechnics which derives its authority from the Provisional National Defence Council (PNDC Law 32. Amended by Parliamentary Act 745 2007) and the rectors are the heads of administration responsible for the efficient utilization of the polytechnic resources. The rectors are supported by the vice rectors, registrars, faculty deans, heads of departments, finance officers, librarian, internal auditors, the planning officers and the students representative council. The study further revealed that all polytechnics operates the semester system and inadequate funding, inadequate staffing, high staff turnover, high enrolment, lack of effective industrial linkages, outdated curriculum delivery and unstable academic environment are some of the challenges the study has found out. Adequate funding by the government, recruitment of qualified lecturers, provision of adequate facilities by the government and revisions of outdated curriculums' can go a long way to make the polytechnics a better place for middle man power training in Ghana and also to meet the target of the Millennium Development Goals.

Keywords: education, polytechnic, management, delivery challenge

Introduction:

Teferra and Altbach (2004) have observed that colonialism and its remnants have impacted greatly on Africa's higher educational system.

According to Sawyer (2004), African academic institutions have been shaped and modelled along western education institutions. As observed by Teferra and Altbach (2004), higher education in the developing world as in Africa are the legacies

of colonial polices. Effah and Hoffman (2010) have observed that Tertiary Educational Institutions have distinct features from other organisational types that in turn make their management different. Characteristically, Tertiary Educational Institutions are self-governing and autonomous (Effah and Hoffman 2010). The management of polytechnics like other TEIs in Ghana is akin to the bicameral system that has evolved out of Ghana's association with Britain (Effah and Hoffman 2010). This relationship has had a major implication for Tertiary Educational Institutions in Africa (Effah (2005) & Teferra and Altbach (2004).

The Governing Council is the highest decision making body and derives its authority from Provisional National Defence Council (PNDC) Law 321(1992) as amended by Parliamentary Act 745(2007). Polytechnic management dwell so much on the committee systems that are clearly spelt out by their statutes. Thus, the management structures of polytechnics are drawn from its parent Act (PNDC Law 321) and the individual polytechnic statutes. The Governing Council is the highest statutory organ that oversees the activities of polytechnics and responsible for the appointment and discipline of all staff including the head, the determination of the educational character, vision and mission of the institution and for matters relating to management of finances and resources utilization of the institution (Polytechnic Act 745, 2007). Each polytechnic has a GC made of 13 members headed by a chairperson appointed by the President of the Republic. The Governing Council meets quarterly for the dispatch of its business; however, the Chairperson at the written request of not less than six members may convene an extraordinary meeting. When the chairperson is duly convinced of the urgency of the matter s/he will convene the meeting to deliberate on the issue(s) specified. In the absence of the Chairperson, the Governing Council shall elect one person to chair the day's proceeding. With 2/3 members of present, the quorum for business is established. Decisions are

carried through a simple majority. However, the chairperson has a casting vote that can be exercised to break ties.

Rectors are the heads of administration and thus ultimately responsible for the efficient utilization of the institution's resources i.e. men; materials; machines and money (4Ms). They are appointed for a four-year term and subject to renewal. Rectors manage the institution with the support of other officers: Vice Rector (VR); Registrar; Faculty Deans (FD's); Heads of Departments (HoDs); Finance Officer (FO); Librarian; Internal Auditor; and Planning Officer among others. Another equally important structure of the polytechnic management is the students' representative council (SRC) that operates under the Dean of students' office and has representation on the Governing Council and other committees.

Below the Governing Council is the Academic Board whose object is to protect the academic interest of the institutions. The Academic Board exercises sovereignty over academic matters and the highest decision making body on academic issues. The Academic Board presides over issues such as courses taught, course content and quality, entry requirements, student discipline and qualification for award of degrees among others. The Rector chairs the Academic Board, convocation and other statutory committees. With the exception of the Governing Council, decisions of the Academic Board take precedence over any other decisions taken within the polytechnic. The Board operates through the committee system; memberships of which are defined and drawn from the polytechnic's statute. Total membership of the Academic Board is dependent on the number of schools in each institution as it is the varying factor along with the permanent members: Rector, Vice Rector, Registrar, Dean, and Faculty Deans; with the librarian and the Finance Officer in attendance. Nonetheless, non-members may be co-opted for special assignments.

Below the Academic Board is the executive committee (EC) with membership drawn from the Academic Board. The Executive Committee meets

quite frequently to attend to matters of urgent importance in between the normal meetings of Academic Board and report to it (Academic Board). Other statutory committees charged with specific responsibilities include: Appointments and Promotions Board, Post Graduate and Staff Development and Welfare and Housing among others. However, a number of checks and balances within the system do allow for the referral of matters to a lower or higher committee for a second opinion (Polytechnic Statutes). In essence, by virtue of their memberships of committees and boards, authority and influence is vested in the faculty (Afeti 2003; Effah 2003).

All polytechnics in Ghana operate the semester system comprising sixteen weeks per semester. Each semester is interspersed with lecture, practical, class assignments, examination and end of semester examination. Attendances to lectures are tied to registration and payment of fees at the beginning of each semester.

Methodology

This study adopts a cross sectional research design (CSRSD). According to Babbie (2010), CSRSD involves observation of a sample, or a cross-section, of a population or a phenomenon that are made at one point in time. The option of using CSRSD was tempered by four main considerations as suggested by Blaikie (2006): purpose of the study; the time span for data collection; data analysis type and resource availability.

Two sets of instruments were used to collect data for this study: interviews and questionnaires. The data was collected between December 2010 and July 2011 and involved six different category of respondents (including former polytechnic Rectors; students, current polytechnic faculty; former polytechnic faculty, polytechnic administrators, and government officials) across seven polytechnics in the tertiary sub sector of Ghana. In all, a total of 65 respondents were sampled.

The study piloted an on-line questionnaire to elicit the data from the academic staff respondent category only. Questionnaires informed by instruments used in earlier studies were adapted and used in a pilot study. Data was statistically analysed by the secured web base package. The summarised data were then exported to MS Excel for analysis and imported into MS Word and analysed using the Statistical Package for the Social Sciences (SPSS). Results of the pilot study provided lead-in themes that facilitated the couching of questions for the main qualitative interviews. Polytechnics in Ghana are faced with numerous challenges. These challenges are both human and material and include the following.

Inadequate Funding

Funding of Higher Education is one major issue facing nations across the world and Ghana is not an exception. Funding of Ghana's tertiary sub-sector has hovered around 14-23% of the national budget between 2003 and 2007. Indeed, the sad fact is that polytechnics have received less adequate funding and stable support compared to universities (Girdwood 1999). Effah and Adu (1998) have noted that, polytechnics in 1998 received about 28% of inputs requested from government; this percentage appreciated to 58% in 2000. Though the GETFund has hugely supported the education sub-sector since it began operating in 2001, its allocations to polytechnics have been skewed in favour of universities. From the data in figure 1b below, it's apparent that between 2001 and 2009 polytechnics received 21.56% while PUs received 73.86% during the same period. This is against the backdrop that universities are more established than polytechnics in every respect. One would expect that the GETFund's allocations to polytechnics be cupped up because of their peculiar situation. This notwithstanding, the GETFund has contributed tremendously and continue to do so in uplifting polytechnics from their doldrums to their present improved state. Table 1 and 2 below shows the total expenditure of education in percentages at the various levels in Ghana as 2006 and percentage of expenditure at

the tertiary levels in Ghana between 2001-2009 respectively.

Table 1: Percentage expenditure of education between 2003-2006

Level	Expenditure (% of total education expenditure)			
	2003	2004	2005	2006
Primary	40.0	32.0	30.0	28.0
JSS	22.0	16.0	18.0	17.0
SSS	15.0	20.0	21.0	16.0
TVET	1.0	1.0	1.0	1.0
Tertiary	14.0	21.0	20.0	23.0

Source: Ministry of Education Report (2007).

Table 2: Percentage Expenditure of Tertiary Education between 2001-2009

Sub-sector	Allocation 2001-2009 in Gh¢	Percentage
Public Universities	283,853,255.18	73.86%
Other Public Tertiary	15,494,527.59	4.03%
Polytechnics	82,857,288.24	21.56%
Private Tertiary	2,100,000.00	0.55%
Grand Total	384,305,071.00	100.00%

Source: GET Fund Review and Outlook (2001-2009)

The short fall in terms of budgetary allocation is required to be financed from internally generated fund (IGF). Even here, polytechnics are handicapped as compared to their university counterparts. For instance, for 2010 academic year, total IGF generated within the tertiary sub-sector was GH¢147, 694,341. Of this amount,

universities bagged GH¢122,391,964 (83%); polytechnics earned GH¢14,846,264 (10%); other teaching institutions (OTIs) 6% and supervisory bodies 1%. For 2011, of the GH¢155,079,058 generated, PUs secured 82%; polytechnics 10%; OTIs 6% and 2% for other bodies (NCTE 2011). This funding difficulty leaves the polytechnics unable to meet their developmental needs of Ghana.

Inadequate Staffing

Table 3: Cumulative Designations of Academic Staff in Ghanaian Polytechnics

Designation	Total	Percentages
PRINCIPAL LECTURERS	0	0
SENIOR LECTURERS	3	0.27
LECTURERS	481	43.80
ASSISTANT LECTURERS	19	1.73
PRINCIPAL INSTRUCTORS	103	9.38
SENIOR INSTRUCTORS	186	16.93
INSTRUCTORS	268	24.40
ASSISTANT INSTRUCTORS	38	3.46
GRAND TOTAL	1098	100

Source: Field survey (2012)

Polytechnic in Ghana have suffered from Human Resource challenges since their inception. One of the biggest challenges has been its inability to recruit and retain highly qualified candidates. Effah (2003) has noted that polytechnics have a staff vacancy of 60%. Impliedly, most of the polytechnics are operating below their human

resource capacity. Though this is augmented by the work of part-time lecturers-their commitment levels cannot be relied upon as they have duties first to their employers before polytechnics. According to Afeti (2005) before the upgrading of technical institutes into polytechnics, only 2% of the teaching staff then was qualified to teach in polytechnics with majority first-degree holders and even below. As a consequence, most polytechnics had to “soften” their positions by falling on first-degree holders in the relevant disciplines with the hope of developing them into full-fledge lecturers through its staff development programmes. With 2% in 2002/03, polytechnic staffing improved to 28%; however, by 2009, it appreciated to 44% (NCTE 2009). Table 2 below shows faculty situation as of 2009.

Overall, the national staff development picture looks promising, however, some polytechnics still have majority with lower qualifications. For instance, Wa, Koforidua, Bolgatanga and Tamale have over half of their faculty below the minimum grade (lectureship). The stature of polytechnic faculty affects its corporate image as institution of academic excellence and consequently their enrolment, staffing and bargaining power for better conditions of service.

High Staff Turnover

Added to the precarious problem of unfilled vacancies; and having to manage the system with unqualified staff are the problem of high voluntary faculty turnover from polytechnics to universities and other sectors of the national economy. According to NCTE, the faculty turnover rate in polytechnics was an average of 20 apiece in 2006; while that of Accra polytechnic was 25 per annum. According to Nsiah-Gyabah (2005), Accra polytechnic lost 135 staff between 2000 and July 2005. Tamale polytechnic lost 43 senior members between 2008-2011(Planning Unit 2011). In a similar fashion, Kumasi polytechnic witnessed 111 academic staff resignations between 1996-2010 (Registry, Kumasi Polytechnic 2011). For instance, the turnover of faculty was so severe that the marketing department of Kumasi polytechnic

from 2001-2006 operated with one full-time lecturer while the other complement was sourced from outside. The statistics provided could be more, as most polytechnic in the past did not consciously keep turnover records.

High Enrolments

Enrolments into Ghana’s polytechnic have been on the ascendancy. From just a low total of 1,358 students in 1993, it increased geometrically by 143% to 23,117 in 2003/04 academic year and to 38,656 in 2008/09 academic year. It is important to note that the growth in student numbers has been consistent since the inception of polytechnics except for the 2006/07 academic year when enrolments dropped from 24,983 to 24,664 in the 2007/08. For 2009-2010, enrolment had reached 45,934 students’ (28.3%) of total tertiary enrolments. The worrying observation in the enrolments is the over concentration in favour of business related programmes as against the science and technology courses. A national ratio of 60:40 for the sciences and business is the government policy, but the situations on the ground represent the reverse. For instance, for the 1996/97 academic year the achieved ratios for

business and science was 55:45; it came to 44:56 in 2000/01 and 41:59 in 2003/04 (Effah 2005). Achieved ratios for 2009/2010 academic year was 79:21 for Humanities and Arts and Sciences respectively (NCTE 2011). In short, achieving the national policy of 60:40 enrolments has proved elusive. However, for the first time in 1996/97, the ratios were 55:45 for sciences and humanities respectively. The inability of the secondary system to train and turn out academically grounded and disciplined candidates in the sciences perhaps explain this problem of low science enrolments. This in turn has affected polytechnics in their quest to produce the needed scientific manpower for the country.

With the high enrolment unmatched by adequate and stable resources i.e. human, material and physical infrastructure are over-stretched. For instance, 91.2% of the 45,535 students in the

sampled polytechnics are without residential accommodation compared with 8.7 % (3,975) resident students. The huge numbers also translates to high teacher–student ratio; this consequently affects the quality of instructions.

For example, in 2003/2004, management and business courses had a teacher-student ratio of 1:65. Such a ratio is too high for effective and efficient teaching and learning. Table 4 below shows polytechnic enrolments.

Year	1993 - 94	1994 -95	1995 – 96	1996- 97	1997 – 98	1998 – 99	2000 – 01	2001 – 02	2002 – 03	2003 – 04	2004 – 05	2005 – 06	2006 – 07	2007 – 08	2008 – 09	Grand Total
Enrolment	1385	3634	5918	7420	9942	12963	16491	18459	20442	23117	24353	24983	24664	28695	38656	26112

Table 4: The commutative student enrolment for polytechnics from1993/94-2009

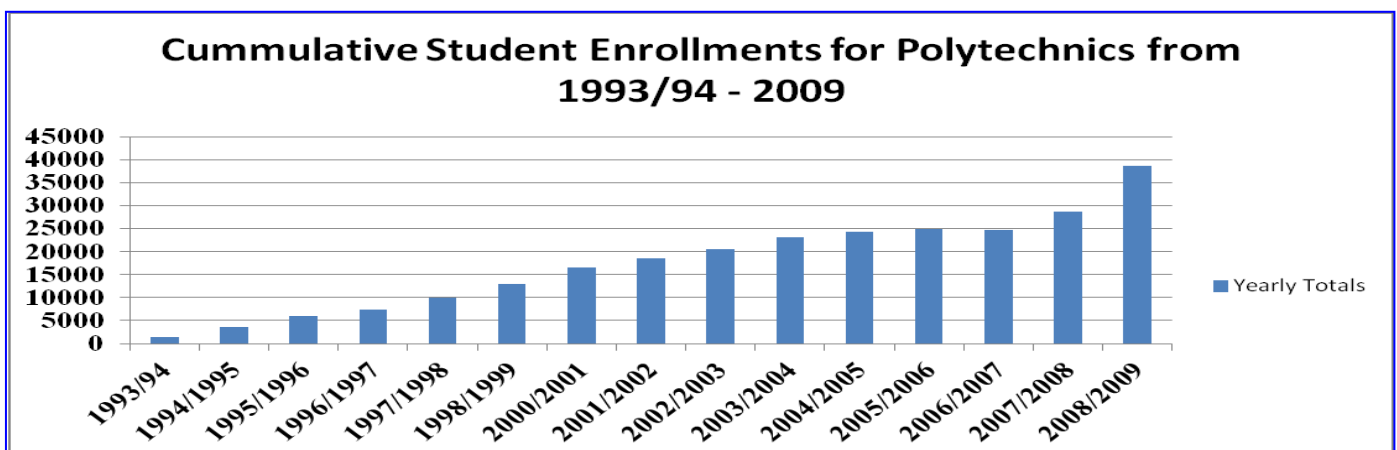


Fig 3: Cumulative enrolment for polytechnics from 1993/94-2009; source: Adapted from NCTE statistical Digest (2007/8)

Lack of Effective Industrial Linkages

Ghana's polytechnic system lacks a stable and enduring collaboration with industry. As a requirement, HND students are required to have industrial attachment of three months in both their first and second years of study. But this is hardly done due to the lack of industries; also considering the huge number of students, the few industries available do not have adequate places to absorb

large student numbers. Moreover, the design of attachment is highly unstructured and poorly

supervised. Furthermore, fact that the attachment is unexaminable and not part of accredited courses provide basis for most students to take it lightly. Faculty who are supposed to have that “industrial feel” are themselves deficient. Though the service conditions avails this opportunity, very few faculty members have really seized the

opportunity to go through attachment. The wisdom behind faculty attachment is to enable faculty staff to get abreast with technological advances applied in industry. Such visitation will ensure some congruence between courses taught and what pertains in industry.

Curriculum Delivery

Polytechnic curriculum is required to be practical-oriented. However, for Ghanaian polytechnics, the approach is rather “bookish” with teachers at the centre of affairs. It also has very little practical training and inputs from industry. Its curriculum was wholly adapted from foreign models of CIM and ACCA among others without recourse to local needs (Afeti 2003). Whilst these bodies have reviewed their curriculum severally, those of polytechnics are yet to see any major revision. According to Effah (2005), the current curricula is not in tune with the established criteria of both the UNESCO and ILO in providing scientific knowledge, skills and other core competencies needed for steady career development.

Unstable Academic Environment

The academic environments of polytechnic are highly unstable. Major stakeholders such as unions and students within the network have taken turns to strike in order to press home one demand or the other. Effah (2004) notes that POTAG, TEWU and students accumulated 27 weeks of inactivity due to strike actions. Though the situation is getting stable, there are still pockets of industrial action being witnessed on polytechnic campuses. For instance, on the 1st of August 2010, POTAG called a strike for six weeks. The series of industrial disputes that characterize polytechnics has dented its image and scares away foreign students and other prospective investors (Effah 2004). The instructional time lost due to strikes cannot be quantified. Stakeholders within the network should engage in dialogue in resolving their grievances. On the contrary, government must show understanding when polytechnic issues come up for discussion.

Failings by government to engage and dialogue with stakeholders exacerbate the impasses.

Discussions

Polytechnics in Ghana have since their establishment gone through a myriad of problems; which in turn have impacted their delivery. The interviews generated divergent views as each respondent lay claim to one constraint or the other as the first. A cross-section of participants alluded to the enormity of these problems; yet they remain optimistic about their future. A government official summed it all in the following words:

So, these are the five major challenges (1) relevance (2) perception (3) sustainable funding (4) obsolete equipment (5) capacity of the faculty (Appendix D6).

In light of the above evidence, it can be argued that the problems confronting polytechnics are many and varied. The interplay of these factors at both the individual and collective levels shape access and quality of polytechnic education and its delivery. Polytechnics have three main sources of funding - government, GETFund and internally generated funds (IGF). Funding from both GETFund and government has been consistent but inadequate to keep up with their expenditure. Polytechnics are handicapped in their ability to generate IGF compared to Universities. Funding came up strongly as a major constraint confronting polytechnics during interviews. A former chairman of the parliamentary select committee on education expressed the following sentiment:

Funding is one of the challenges. The polytechnic and technical schools, they lack the equipment and materials that they need. It means the funding is poor for them to be able to acquire modern equipment and then the materials that they need. Why is it that polytechnic and technical schools are still using 40 years old engine for training?

Another government official added:

“The first problem is funding. But when you prepare your budget in the polytechnic-you give it 100%. What you get from government is between 40 and 60%. So, the institution has to provide the other 50% but providing the 50% is very difficult”

In contrast, a government official in an interview said:

“One, challenges of higher education, if you say it everybody will say funding but I don’t think it’s funding; it’s not funding.....”

Inferring from the above, it is clear that Ghana’s higher education sector is facing financial challenges. With fewer resources, polytechnics are unable to undertake research and other programmes and policies. In view of their strategic roles, government will have to step-up its funding to enable them function effectively. Enrolments figures in absolute terms into polytechnics look impressive. In reality however, many qualified candidates are denied access due largely to infrastructural constraints. For instance, polytechnics in 1999/2000 admitted only 35% of qualified applicants; 41% for 2000/2001 and 37% for 2001/2002 academic years. Speaking to the issue, a resignee highlighted the scale of the problem when he retorted:

“I know that polytechnics don’t have facilities. Facilities such as lecture theatres are insufficient and all of that and for the students also many of them find it difficult to get organisations for industrial attachment”

A student leader also noted:

The other threats are that infrastructural development at the polytechnic level is not actually anything to write home about (Appendix E 2).

Elaborating, a former rector stated:

I don’t agree with the grade cut-off, and there is no space and every matriculation, 5,000 applied due to lack of space we took it down to 1,000.

The following year, you come and repeat the same thing (Appendix B2).

These arguments amply testify that polytechnics are poorly resourced and equipped which in turn affects enrolment and graduate training. To assuage this problem, more facilities have to be provided to cater for the unstoppable demand.

The quality of staffing in polytechnic faculties have hampered the delivery of quality polytechnic education as many of the staff still hold lower qualifications. For polytechnics to be able to engage in its scholarly mandate of providing high quality level middle manpower needed for industrial growth, it should have the requisite human capital in the right numbers. Poor staffing therefore emerged as a challenge confronting polytechnics. Responding to this issue, a former rector remarked:

The very first is the availability of teachers who themselves are highly trained. So, the polytechnics will survive if we can get teachers who really are competent, well qualified and who can make an impression (Appendix B1).

In support, a resignee contented:

In adequate staffing especially, the faculty and that is about the numbers. Besides the numbers, there is also the need to have higher level qualifications for faculty in the polytechnic for them to be able to bring about the kind of confidence that the products should have. You have a lot of first degree holders who are teaching courses, they aren’t assisting second degree holders in teaching but they are handlers of courses, set their own questions and all that. It’s not the best.

The staffing level as is currently obtainable does not engender high level of public confidence in the training provided by polytechnics. This perhaps partly explains the low public perception of polytechnics. To redeem its reputation, polytechnics must enlist and retain quality workforce.

Polytechnics are victims of strategic poaching to the universities and other organisations. Contributing, an administrator reflected:

It is high, because for each year, may be half a year or quarterly, we do have staff who resign or who vacate post. But in terms of employment, the polytechnic does employ either once or twice a year.

Another administrator stated:

High, because you see, what appears to be the major reason is better opportunities that are being offered in terms of emolument, remuneration, compensation for work done?

Lamenting on the issue, a faculty member observed:

Yes, I mentioned this staff movement which affects intellectuality; which also means that if you don't have the right calibre of staff, if you cannot recruit the best staff, you are not competitive in that direction, that you can't offer the best salaries and allowances, you can't offer the best working conditions then you are going to have staffs who may not give off their best or you will have staffs who are not exactly the best and that can affect the output of polytechnic training.

The evidence above affirms that turnover is high in polytechnics. It further affirms polytechnics' inability to retain its valued faculty, particularly those on whom they have made serious investments through training. This has resulted in the loss of experienced faculty i.e. tacit knowledge resulting in the loss of skills, knowledge and experiences accumulated during their tenure. To counter faculty turnover, polytechnics will first have to understand its causes and develop retention policies to contain it.

Enrolment into Ghana's HEIs in the last two decades has grown exponentially, especially at the polytechnic level. Although, a national priority, the increase in enrolment has been constrained by unmatched expansion in infrastructure due largely to underfunding. These constraints have always compelled polytechnics to limit enrolment resulting in the turning down of some qualified applicants. Contributing to this issue, a government official noted:

We just finished Sunyani polytechnic 2009 examination results and Accountancy alone, I bet you is over 600 students, so if one teacher takes such a class, no wonder they can't set mid-semester examination tests and so continuous assessment is not done well.

A former rector remarked:

I don't agree with the grade cut-off, and there is no space and every matriculation, 5,000 applied due to lack of space we took it down to 1,000. The following year, you come and repeat the same thing.

Another government official added:

If you go to some of the classrooms, they are crammed. A class of let's say 500 people; you will see many people standing on the verandas –listening to lectures. It is not the best (Appendix D3).

Inferring from the evidence above, it can firmly be argued that high enrolments unmatched by increased staffing and facilities exerts a lot of pressure on staff in terms of workload that in turn affect student preparations. To expand access, staffing and facilities of polytechnics should be expanded expeditiously. The non-revision of the current curriculum in the polytechnics affects the training levels of its trainees. Using out-dated curriculum means that polytechnics training are incongruent with labour market's needs.

Commenting, a former rector succinctly noted: ... 'They should make it more relevant to what pertains in the industries...' Re-echoing the morbid nature of the curricula, a faculty member remarked:

"You know the HND curriculum as we have it now; we have been using this curriculum for the past 10 years. Apparently, because it is national, no individual polytechnic can change anything"

Emphasising the point, a government official observed:

The world is changing fast so the curriculum at most every five years should change. We need to make sure that we review curriculum regularly but we don't get the funds for it.

Referring to the same issue, a current faculty noted:

"Our inability to link up with industry I think is not helping us. Perhaps, if we strengthen our collaboration with industry and do good market survey and know the direction the nation is heading then we will be able to prepare our manpower for those areas and then train them.... Using statistics I would have thought that for the last census for instance, HND [statistics] students in the country would have been the first choice for the survey. It will have provided an opportunity to train these students on their return, given their feedback, then we will know what to do with our curriculum so that for further census or further application to statistics then we will know how best to go about it"

Judging from the excerpts above, it can be argued that the curricula of polytechnics run counter to its objectives of quality training. The current training results in the production of theory based scholars who lack practice. This undoubtedly partly exacerbates the bruised reputation of polytechnics. There is therefore the need for polytechnics to collaborate with relevant stakeholders in designing and implementing its curricula.

The polytechnic environment has been very turbulent and fluid since their establishment in 1992/93. The unstable environment (calendar) of the network featured prominently in the study as a major constraint that disrupts the flow of planned programmes. Speaking to the issue, a government official poured out his frustrations when he contended:

"First of all, everything that we do here, the information that we need to work must come from the polytechnics and the polytechnic is a very volatile area. Anytime there is unrest at the polytechnics, it affects us, you need any information, and they are on strike; POTAG is on strike so we don't touch anything academic and that affects our work. But sometimes I wonder if they are even running shifts on strike, after POTAG has finished then it is the turn of students or TEWU or PAAG; so this is a big (problem) and we all want peace to prevail there so that we can do our work"

As evident in the quote above, the instability increases costs in terms of man hour loss to government, employers and students. It also affects planned completion times and rates, especially, students on study leave. It further adds-up to the reputational crisis of polytechnics resulting in the sector been less attractive to prospective employees, students and investors. To engender public confidence, polytechnics must ensure some measure of stability on their campuses. The attitude of government to issues

from polytechnics as compared to universities has been a very serious challenge. The actions and inactions of governments in responding to polytechnic issues featured prominently as evident below. A former faculty member highlighted that:

It is not treated with the same urgency as when public sector university lecturers make demands and the previous academic year (October-December 2010) saw something which can confirm that perception; because there were two phases of agitations and the university teachers were met in the quiet and I believe they are satisfied, so there is nothing more. The polytechnics have to be closed down for a long time and I don't know if they are satisfied even now.

Corroborating, a current faculty, it was observed that There's that kind of bias from government. In a way, they highlight the universities more as I just mentioned by responding every time quickly to the universities demand to the detriment of the polytechnics. Whenever they hear any cry from the universities they seem to pay attention to that.

Elaborating, an MP added:

The faculty of the polytechnic and technical schools, who cares about them. If it were UTAG they would have run quickly to meet UTAG. POTAG has been crying, nobody minds them.

As portrayed above, it arguable that successive and present governments have shown open bias towards universities compared to polytechnics. This has heightened public misconceptions of polytechnics and their roles in national development. Government need to forge a more positive relationship with polytechnics and other stakeholders. Equally, the autonomy of polytechnics must be guarded and protected.

Polytechnics have since their establishment been dogged with negative perception. Contributing on

the issue, a former rector stated, '...the perception about the low calibre of the polytechnic institutions as compared to the universities ...'

Another former rector retorted:

"If you like the perception that, the general perception of polytechnics as baby universities or in fact in worst case scenario as preparatory schools for the universities"

Corroborating, a student leader reflected the strong believe that the perception that is already created that there is no respect for polytechnic education in the country is actually a major factor.

Elaborating, an MP declared that people still in this country tend to respect titles. He is a lecturer in the university- he is more respected than he is a lecturer at the polytechnic.

Another MP added:

A teacher or lecturer who feels he's good enough to teach in the university and he finds teaching in the polytechnic and his conditions of service are nothing to write home about, they cry for attention nobody minds. So he will leave the polytechnic and join the university where UTAG is respected by government and the FWC. If it were UTAG they would have quickly run there.

Following from the above, a conclusion can be drawn that public perception has not been favourable to polytechnics compared to universities. This bruised reputation has impacted greatly on the abilities of polytechnics to attract and retain staff. It has equally affected enrolment and investments into the sector. Polytechnics require serious public relations work to repair and redeem its image so as to stay competitive.

Polytechnics at their inception inherited a large crop of unqualified staff. Many have since upgraded themselves but majority of the faculty still hold lower qualifications to function in a

tertiary system. Furthermore, polytechnics have not been able to attract and retain higher quality manpower. This theme was re-echoed by majority of the respondents. For instance, a government official stated:

The people who are hired to head the polytechnics and then the Registrars, but mainly the Vice Rector, they are chosen through a kind of election and it may not be because of one's ability, skill or efficiency in handling management.

Supporting, a resignee reiterated:

Leadership of the polytechnic at that time didn't work in the interest of either students or staff. I think they were rather too selfish.

Also, a current faculty had this to say on leadership:

Yes, I think that when a Rector is to be appointed, they should appoint someone who is experienced in dealing with polytechnics. I think for now we rely on the university and the curriculum in the university is quite different from the polytechnic.

Following from the above, it can be inferred that polytechnics have suffered from bouts of leadership problem. Moreover, the managerial cores of some polytechnics have had to experiment on the job. This flows from the lack of organised and methodical leadership and management training programmes. To enhance efficiency, polytechnics have to provide more training programmes to its staff.

Government's Current Policy on Polytechnics

Governments, both past and present have placed PE at the top of its policy agenda. For instance, government in 2004 renewed its pledge to continue supporting polytechnics in their drive to produce

technically trained graduates for national development.

Government will continue to equip the polytechnics to make them offer tertiary education in their own right; to emphasis practical skills that are needed to run the productive economy and build a nation (Government White paper (2007).

As a consequence, government increased budgetary allocations of the network from ₵31 billion cedis in 2001 to ₵111.54 billion cedis in 2006, representing an increase of 259%. Also, the passage of polytechnic Act 745 (2007) was done to enable polytechnics offer Bachelor of Technology and other higher degrees- Bachelor of Technology has been initiated as *top-ups* for its army of HND graduates yearning for academic progression. Also, the support of government has sustained the academic and research programmes of polytechnics through the GETFund's Faculty Development window. The facility has enhanced the capacities and quality of polytechnic workforce. Further, government support in transforming the infrastructural base of the network is worthy of commendation.

In order to achieve the national tertiary policy of 60:40 enrolments for science and technology programmes as against the Arts and Humanities, polytechnics with the approval of government have mounted access (Pre-HND) programmes for graduates of the technical/vocational schools as a way of upping the gap in the science based programmes into polytechnics. A second window of closing the gap for the science based programmes is the provision of remedial education to qualified science students with weak aggregates to bring them up to acceptable levels before being admitted and enrolled to make up the numbers in the sciences.

Other policy initiatives by government include the cooperation between the World Bank, JICA and TALIF projects. These projects and collaborations have enhanced the resource base of polytechnics

in terms of finances, pedagogy, research, ICT and Human Resource development. Physically, the GETFund has completed and continues to execute many projects such as staff accommodation, lecture theatres, libraries, student hostel as well as building and equipping science and ICT laboratories among other projects across all polytechnics. Government has further endorsed the policy of institutional quotas for less endowed school. Also, the gender policy of 50:50 for males and females is being vigorously pursued to level up the enrolment gap of females (NCTE 2011; Ankomah et al 2005). Overall, these policies outlined mirrors government current thinking regarding polytechnic education in Ghana.

Conclusions and Recommendations

In view of the evidence above, the sustainability of polytechnics remains a key issue. However, with the commitment demonstrated by present and past governments particularly in areas of staff development and infrastructural expansion through GET-Fund projects, it is possible to conclude that polytechnics are financially sustainable in the short and long run.

Although polytechnic education has been of tremendous importance to Ghana in terms of their manpower development in particular and their overall socio-economic developmental agenda, the sector is still faced with a number of challenges. The following recommendations are made for effective operations of the polytechnics in Ghana.

- An increase in funding of the Ghana polytechnic by the government will go a long way to improve efficiency and effectiveness in administration.
- The provision of adequate infrastructure by the government will allow the authorities of the polytechnics to enrol more qualified applicants in order to meet the middle man power needs of the country.

- Training and recruitment of more qualify staff by the polytechnics and provision of scholarships by the government to the staff to further their education thus going out for the Doctor of Philosophy degree will improve teaching and learning in the polytechnics in Ghana.
- Creating a conducive learning environment for effective learning and teaching by both the government and the polytechnic lecturers will also develop the human capital of the country. The current environment in the polytechnics where the polytechnic lecturers always embark on strike actions to address their grievances does not augur well for the effective teaching and learning.
- Empowering all the polytechnics in Ghana by the government to start awarding bachelor, masters and PhD degree will improve quality of teaching and enhance the human resource development of the country. This should be backed by legislation.

References

- Afeti, G. A. (2005). A decade of polytechnic education in Ghana. Accra: Daily Graphic. Wednesday, April 13, 15 & 18. Page 10.
- Afeti, G. A. (2003). Promoting Change and Innovation in Tertiary Education: The experience of Ho Polytechnic. A case study prepared for a regional training conference on improving tertiary education in sub-Saharan Africa: Things That Work! Accra.
- Afeti, G. A. (2005). Strategic institutional development in the South: A case study of Ho Polytechnic education, Ghana. Accra.

- Akyeampong, K. (2010). Educational Expansion in Ghana: 50 Years of Challenges and Progress. Brighton : CREATE .
- Akyempong, A. K. (2002). Vocationalization on Secondary Education in Ghana. Washington, DC: World Bank.
- Altbach, P. G. (1974). Comparative university reform. Cambridge: Schenkman.
- Ankomah, Y. A., Koomson, J. A., Bosu, R. S. & Oduro, G. K. T. (2005). A Review on the Concept of Quality in Education: A Perspective from Ghana. Bristol : EdQual RPC.
- Atakpa, S. K. (2006) Managing Human Resource in Ghanaian Polytechnics – Kick Off Conference of NPT/UCC Project. Elimina: UCC.
- Atakpa, S. K. (2006). Project Design and Management Developments in Polytechnics. Cape Coast : IEPA.
- Blaikie, N. (2006). Developing Social Research: The Logic of Anticipation. Cambridge Polity Press.
- Babbie, E. (2010). The Practice of Social Research. Belmont CA: Thomson and Wadsworth.
- Effah, P. & Hoffman, A. (1998). Funding Tertiary Education. Report Prepared for the National Council for Tertiary Education (NCTE), Ghana. Accra: NCTE.
- Effah, P. & Hoffman, A. (2010). Regulating Tertiary Education. The Ghanaian and International Perspective. Accra: Ghana Universities Press.
- Effah, P. (2006). A decade of polytechnic education in Ghana: an assessment of achievements and failures. Lecture Series delivered at Sunyani polytechnic, Ghana. Sunyani
- GETFund (2010). The GETFund – Review and Outlook (2001-2009),
- GETFund Consultative Forum @ Villa Cisneros Resort & Holy Trinity Spa, Sogakope
- Ghana, G. (1991). Reforms to the Tertiary Education System, Government White Paper on Polytechnic education in Ghana. Accra: Ministry of Education.
- Kumasi (2011). Interview granted by the personnel officer of Kumasi polytechnic during data gathering for my PhD thesis.
- PNDC. (1992). Polytechnic Law: PNDC Law 321. Accra: Government of Ghana.
- PNDC. (2007). An Act to revise the law relating to the polytechnics and to provide for connected purposes. Accra : Ghana Government : MOE
- Sawyer, A. (2004). African Universities and the Challenge of Research Capacity Development. JHEA/RESA, 2, 211 - 240.
- Tamale Polytechnic(2009). Labour turnover in Tamale Polytecchnic: A Reported submitted by the planning unit.
- Tamale Polytechnic (1993). The Statutes.
- Teferra, D. & Albach, G. (2004). African Higher Education: Challenges for the 21st Century. Higher Education, 47(1), 21 - 50.